

WISCONSIN EPI EXPRESS

April 8, 2003

[Wisconsin Department of Health & Family Services](#)

Division of Public Health

Bureau of Communicable Diseases

“Surveillance provides information for action.” [World Health Organization](#)

The WISCONSIN EPI EXPRESS provides a regular update on communicable disease issues of importance in our state and is intended primarily for participants in the public health surveillance system. Please let us know if the topics covered are on target or if there are others that we should be addressing. Thank you. Herb Bostrom: bostrrhh@dhfs.state.wi.us

In This Issue:

1. Alert about Inadvertent Use of Bicillin[®] C-R for Treatment of Syphilis
2. Severe Acute Respiratory Syndrome (SARS)
3. State Laboratory of Hygiene Rabies Testing Policy
4. Limited Multi-Dose Use from Vials of Immune Globulin (IG)
5. Tuberculosis Investigation in Milwaukee Area
6. Smallpox Vaccination Clinic Activity
7. Hepatitis C Virus Infection in Wisconsin, 1997-2002: A Review of Case Surveillance Data
8. Important CDC Satellite Telecast/Webcast on HIV Rapid Testing
9. Upcoming Wisconsin Hepatitis Conference – Save the Date!

1. Alert about Inadvertent Use of Bicillin[®] C-R for Treatment of Syphilis

This notice is to help prevent medication errors in the treatment of syphilis. All health care providers must safeguard against inadvertently treating a syphilis patient with a penicillin product that may not be effective.

In January 2003, a local health department was notified that a community health center had inadvertently treated syphilis patients and their sex partners with a penicillin preparation, which is not indicated for the treatment of syphilis. A similar situation has been described in a 1999 MMWR article <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm4835a2.htm>.

The CDC Sexually Transmitted Diseases Treatment Guidelines 2002 recommends Benzathine Penicillin G (BPG), 2.4 million units (MU) in a single dose for primary, secondary or early latent syphilis. Late latent syphilis and tertiary syphilis, according to CDC, should be treated with three doses of 2.4 MU of BPG at one-week intervals. BPG is a long-acting penicillin which maintains the necessary blood serum spirocheticidal levels to treat the syphilis organism, *Treponema pallidum*. **Bicillin[®] L-A** (Monarch Pharmaceuticals, Bristol, TN) is the BPG containing product manufactured in the United States, which is indicated for the treatment of syphilis.

Monarch manufactures three BPG containing products that could be easily confused because they have similar names; similar National Drug Code (NDC) numbers used for ordering medications; and similar dose preparations. However, the strength of BPG and the packaging are

different for the three preparations. The BPG containing products manufactured by Monarch are:

- **Bicillin® L-A** - contains either 1.2 MU of BPG in a 2 ml tubex (NDC #61570-147-10) OR 2.4 MU of BPG in a 4 ml syringe (NDC #61570-148-10). It is indicated for the treatment of syphilis. Both doses have blue and white packaging. Pediatric dosing is also available.
- **Bicillin® C-R** - contains both BPG and procaine penicillin G. This formulation is **NOT** indicated in the treatment of syphilis. It is supplied in either a 2ml tubex containing 0.6 MU of BPG and 0.6 MU of procaine penicillin G for a total of 1.2 MU (NDC# 61570-140-10) OR in a 4 ml syringe containing 1.2 MU BPG and 1.2 MU procaine penicillin G for a total of 2.4 MU (NDC# 61570-142-10). Both have green and white packaging. Pediatric dosing is also available.
- **Bicillin® C-R 900/300** - also contains both BPG and procaine penicillin G. This formulation is **NOT** indicated in the treatment of syphilis. It is supplied in 2 ml tubex containing 0.9 MU of BPG and 0.3 MU of procaine penicillin G (NDC# 61570-144-10). This product also has green and white packaging. Pediatric dosing is also available.

Wyeth-Ayerst Laboratories (Philadelphia, Pennsylvania) discontinued manufacturing the three Bicillin® products described above, as of December 2001. However, these products distributed under the Wyeth-Ayerst label may still be in circulation because of the 24-month shelf life of these products. Pfizer, Inc., (New York, NY) also manufactured a BPG containing product, **Permapen® ISOJECT®**, until August 2002. This product is also indicated for the treatment of syphilis and is likely to still be in circulation.

Health care providers who treat patients for syphilis should take extra precaution to ensure that the appropriate preparation of Bicillin®, **Bicillin® L-A** is ordered, received, and administered. If a patient has been treated with Bicillin® C-R for syphilis:

1. The patient should be contacted, re-evaluated clinically and serologically, and treated for the appropriate stage of syphilis with either **Bicillin® L-A** OR **Permapen® ISOJECT®**,
2. The patient should be instructed that their sex partner(s) should also be re-evaluated clinically and serologically to determine the need for further follow-up, and
3. The local health department should be notified of the situation.

Source: Centers for Disease Control and Prevention, STD Division

2. Severe Acute Respiratory Syndrome (SARS)

The Wisconsin Division of Public Health (WDPH) continues to monitor for the presence of Severe Acute Respiratory Syndrome (SARS) in Wisconsin. Numerous reports of possible SARS

have been investigated in the state, but at this time only one remains a suspect case. That patient has made a complete recovery.

Through local public health agencies, clinicians in Wisconsin have been notified to be on the alert for those patients that present with clinical illness consistent with SARS. Criteria for SARS patients are defined as:

Measured temperature $>100.4^{\circ}\text{F}$ ($>38^{\circ}\text{C}$) **AND**

- One or more clinical findings of respiratory illness (e.g. cough, shortness of breath, difficulty breathing, hypoxia, or radiographic findings of either pneumonia or acute respiratory distress syndrome) **AND**
- Travel within 10 days of onset of symptoms to an area with suspected or documented community transmission of SARS (see list below; excludes areas with secondary cases limited to healthcare workers or direct household contacts) **OR**
- Close contact within 10 days of onset of symptoms with either a person with a respiratory illness and travel to a SARS area or a person under investigation or suspected of having SARS (Close contact is defined as having cared for, having lived with, or having had direct contact with respiratory secretions and/or body fluids of a patient suspected of having SARS).

List of areas with documented or suspected community transmission of SARS:

- Hong Kong Special Administrative Region and Guangdong province in the Peoples' Republic of China
- Hanoi, Vietnam
- Singapore

Physicians with patients who meet the criteria of SARS should immediately contact the Wisconsin Division of Public Health at (608)-267-9003 during work hours (7:45 a.m. - 4:30 p.m.) or (608) 258-0099 after working hours. Collection and transport of clinical specimens must be coordinated through the WDPH.

Note: The after hours number should *NOT* be distributed to the public or the media.

3. State Laboratory of Hygiene Rabies Testing Policy

There has been some recent confusion about the fee-exempt policy for performing rabies testing at the SLH. With the onset of warm weather and the concurrent increase in animal bites, this is an opportune time to remind readers of what this policy entails.

Specimens submitted to the SLH for rabies testing are fee-exempt if:

- 1) the specimen is from a mammalian species that has a reasonable risk of rabies transmission, **AND**
- 2) the specimen is from an animal that:
 - a) has exposed a human **OR**

- b) has exposed a domestic animal, OR
- c) is a domestic animal that is exhibiting signs of rabies

The first criterion above would generally exclude the fee-exempt testing of small rodents and rabbits unless the circumstances of the exposure were unusual (e.g., animal acting bizarrely or exhibiting signs of rabies). The most common misconception about the policy is that testing an animal that has exposed a domestic animal does not qualify for the fee exemption. Such specimens should be tested as fee exempt because of the obvious risk of human exposure from the exposed animal.

The local health department (LHD) acts as the gatekeeper for this policy, however, this does not mean that the LHD must approve each individual submission for rabies testing. Typically, the LHD notifies the submitters of rabies specimens (primarily veterinary clinics) about the policy, and intervenes only if inappropriate specimens are being submitted. In the event of a disagreement about the fee-exempt status of a specimen, the State Public Health Veterinarian serves as the final arbiter of the dispute. The current cost of rabies testing at the SLH is \$184.90.

Questions about fee-exempt rabies testing or about animal bite management in general can be directed to Jim Kazmierczak, State Public Health Veterinarian, at 608/266-2154.

4. Limited Multi-Dose Use from Vials of Immune Globulin (IG)

The Division of Public Health occasionally supplies IG to local public health departments for use in providing hepatitis A prophylaxis in a public clinic setting or to patients who cannot obtain it from private medical providers. The current preparation of IG for intramuscular injection does not contain a preservative, and the package insert states that the vial should be entered only once for administration purposes. IG is only available in 2 ml vials.

The dosage of IG is 0.02 ml/kg, or approximately 0.1 ml per 10 pounds body weight. Since many of the public IG clinics involve the immunization of daycare-aged children, a strict adherence to the policy of entering a vial only once will result in considerable wastage of IG.

After consultation with staff at the National Immunization Program of the CDC, the Division of Public Health is making the following recommendation on this topic:

Because it will take bacteria several hours to proliferate, a vial of IG can be re-entered if the multiple doses are being withdrawn from the vial sequentially within a short period of time (up to two hours). The vial cap should be cleaned before each puncture, and a new needle used each time. Thus, if one is immunizing multiple patients during a single session, it is not necessary to discard the vial after withdrawing each aliquot. However, if more than two hours have elapsed since a vial of IG was entered, any remaining product should be discarded.

Questions regarding the use of IG can be addressed to Jim Kazmierczak of the Communicable Disease Epidemiology Section at 608-266-2154.

5. Tuberculosis Investigation in Milwaukee Area

Since fall 2000, Wisconsin has been participating in a CDC funded low-incidence TB (<3.5 cases/100,000 population) project that involves universal TB genotyping. During 2001-2002, the number of TB cases in the city of Milwaukee increased by 25% from 28 in 2001 to 35 cases in 2002. Recent transmission was considered as a possible explanation for this increase in cases. After review of the genotyping data, the Wisconsin TB Program identified 18 cases in three genotyping clusters in the Milwaukee area. A cluster was defined as 2 or more cases with identical genotype patterns. The Division of Tuberculosis Elimination at the Centers for Disease Control (CDC) was contacted to assist the state and local health departments in investigating the tuberculosis clusters.

The purpose of this investigation was to: identify the source(s) and extent of ongoing TB transmission; search for new TB cases; determine the epidemiologic links among cluster members; and to identify and screen exposed contacts.

Medical records were reviewed, TB cases were re-interviewed, and genotyping data was analyzed to identify sites of possible TB transmission such as homeless shelters, work places and social places frequented by the clustered TB cases.

At the conclusion of the investigation, a total of 25 (9, 11, and 5 in clusters 1, 2 and 3, respectively), culture confirmed TB cases from 1998-2002 were identified in the three clusters. (Seven additional cases were identified during the investigation beyond the initial 18 reported). Sixteen (64%) cases had a sputum positive for acid fast bacilli, 21 (84%) had pulmonary TB, of those, 9 (43%) had cavitary disease. The mean age of the cases was 45 (range 30-73), 64% were men, and 19 (76%) were African American. Seventeen (68%) cases reported crack cocaine use, 22 (88%) excessive alcohol use, and 3 (12%) homelessness. Two cases were HIV co-infected. Epidemiologic links were discovered among all but one case. In addition to 162 contacts previously identified by the local health departments, 67 new contacts and 7 high-risk sites were identified as a result of this investigation.

Two CDC public health advisors have been temporarily assigned to Wisconsin to assist in locating and testing the contacts and making recommendations for targeted case-finding activities to curtail the outbreak.

6. Smallpox Vaccination Clinic Activity

As of April 7, 34 vaccination clinics have been held, at 21 different locations. A total of 704 individuals received smallpox vaccinations at these clinics - 541 healthcare workers and 162 public health workers and one FBI agent. Four adverse events were reported from Wisconsin to the federal Vaccination Adverse Events Reporting System (VAERS), but all of these were mild.

7. Hepatitis C Virus Infection in Wisconsin, 1997-2002: A Review of Case Surveillance Data

Hepatitis C is the most common chronic bloodborne infection in the United States. In Wisconsin, HCV infection has been a reportable disease in since the early 1990's. Clinically, most HCV-infected persons are asymptomatic and diagnosis is made on the basis of laboratory test results.

This surveillance report is based upon laboratory criteria for HCV infection. In Wisconsin, cases of HCV infection are classified as confirmed or unconfirmed.

A case is *unconfirmed* if it has an anti-HCV (repeat reactive) by EIA without verification by an additional more specific assay and the signal to cut-off ratio is unknown. A case is *confirmed* if it has one of the following:

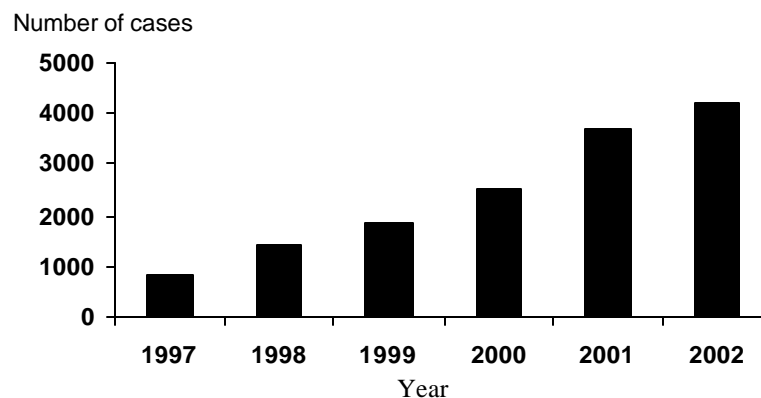
- positive recombinant immunoblot assay (RIBA)
- polymerase chain reaction (PCR) test result
- detectable viral load
- identified genotype

Note: a negative PCR or an undetectable viral load does not exclude the possibility of HCV infection. This report is based on both confirmed and unconfirmed cases of HCV infection.

Hepatitis C data is compiled by the Wisconsin Hepatitis C Program and is based upon hepatitis C infection case reports submitted to the program by laboratories and local health departments.

Between 1997 and 2002, 14,500 cases of HCV infection were reported to the state health department. During this time, the number of HCV cases reported to the health department has increased four-fold (figure). The largest increase occurred between 1997 and 1998 when there was more than 70% increase in the number of cases reported. Although the number of reported cases is still increasing, the percent of increase has declined. Between 2001 and 2002, the number of cases increased only 14% compared to a 48% increase between 2000 and 2001.

Figure. Reported HCV cases, Wisconsin 1997-2002



Gender - Of HCV cases reported, 66% were among men and 32% were among women.

Although men were twice as likely as women to have HCV infection reported, there was a four-fold increase in the number of HCV cases reported for both men and women.

Age - Among cases reported between 1997 and 2002, 48% occurred among persons age 40-49 years. Persons age 30 to 50 years of age were more likely to be diagnosed and reported with HCV infection when compared to persons less than 30 and over 50 years of age. Between 1997 and 2002, the number of reported HCV cases in Wisconsin increased across all age groups. The largest increase (five-fold) was among persons age 40 to 49 years.

Race - Fifty-seven percent of cases were reported without race identified. Therefore, Wisconsin HCV infection data analysis by race is limited. However, from 1997 through 2002, the percent of cases reported without race identified increase from 10% to 52%.

Residence - Of cases reported between 1997 and 2002, 28% (4,005) of the cases were reported from the Milwaukee metropolitan statistical area (MSA). HCV infection, however, has occurred throughout all of Wisconsin and, since 1997, nearly every county has reported at least 10 cases of hepatitis C. Twenty-eight percent of all reported HCV cases have occurred in the Milwaukee MSA. From 1997 through 2002, the number of HCV infection reports increased for all regions within Wisconsin, with the largest increase occurring in the Milwaukee MSA.

Corrections – Of HCV cases reported between 1997 and 2002, nearly 14% (2,000) of the cases occurred among persons residing in the Wisconsin Correctional System. From 1997 through 2002, the number of HCV case reports increased from 24 to 668. Between 2001 and 2002, the number of HCV reports received from the Wisconsin Department of Corrections decreased by 13%.

There has been a steady increase in the number of HCV case reports since 1997. The most striking increase occurred in males, persons age 40-49 years, the Milwaukee MSA, and the correctional system. The increased number of HCV infections in Wisconsin, however, may be a result of improved screening, testing and reporting of persons at risk for HCV infection. Thus, as more people are tested for HCV infection, the number of reported HCV cases may continue to increase.

For questions or additional information regarding HCV surveillance and reporting of HCV data, please contact Angela Russell, Hepatitis C Epidemiologist at 608-266-9710 or e-mail russear@dhfs.state.wi.us.

8. Important CDC Satellite Telecast/Webcast on HIV Rapid Testing

We encourage you to view the upcoming CDC HIV prevention broadcast “Update on Rapid Testing for HIV” on April 24th from 12:00 p.m. to 2:00 p.m. The telecast and webcast will describe details related to rapid HIV testing, including benefits and limitations, implementation considerations for counseling and testing, confirmatory testing for positive test results, quality assurance, training, and resources for updates on rapid testing. The Wisconsin AIDS/HIV Program has reserved twelve sites around the state to view this broadcast. To locate the most current listing of registered sites, go to the CDC’s Public Health Training Network web site: <http://legacy.cdcnpin.org/broadcast/current/IntntSearchSite.cfm> General Information regarding this satellite teleconference can also be found at: <http://legacy.cdcnpin.org/broadcast/current/2003/0424/start.htm> If you plan to attend the telecast, please contact Tara Loushine at the Wisconsin HIV/AIDS Prevention Training System at 608-265-4551. If you want a videotape of the broadcast (available after April 24), e-mail Tara Loushine at tloushine@dcs.wisc.edu. Agencies also have the option of setting up their own viewing site by registering a viewing site at <http://legacy.cdcnpin.org/broadcast/current/AddViewSite.cfm?Cntry=U>

9. Upcoming Wisconsin Hepatitis Conference – Save the Date!

The first statewide hepatitis conference has been scheduled for **Friday, September 5, 2003** at the Monona Terrace Convention Center in Madison. Morning plenary sessions will cover the following topics:

- Future directions of hepatitis prevention and control activities in the US
- Hepatitis C treatment and the roles of specialists and generalists
- Overview of the Wisconsin Hepatitis Strategic Plan.

Afternoon breakout sessions will provide information on:

- Hepatitis vaccination and testing initiatives in high risk populations
- Case management of hepatitis B surface antigen-positive mothers and their families
- Resources for people with hepatitis C infection

Telephone Reporting of Unusual Disease Occurrences

Occurrences of diseases that are uncommon or atypical in Wisconsin, and outbreaks or clusters of disease which are identified, should be reported by phone as soon as possible, to (608) 258-0099. Reports may be made to this number on a 24/7 basis, but please do not use it for normal and routine disease reporting

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